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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before The Board Of Patent Appeals And Interferences

In Re Appeal of Application: )  
Charles B. SIMONE )  
Serial No.: 08/605,628 )  
Filed: February 22, 1996 )  
For: METHOD AND APPARATUS )  
FOR LIFESTYLE RISK )  
EVALUATION AND INSURABILITY )  
DETERMINATION )

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APPELLANT'S BRIEF

Assistant Commissioner for Patents  
Washington, D.C. 20231

This is an appeal pursuant to 35 U.S.C. § 134 and 37 C.F.R. § 1.191 et seq. from the final rejection of claims 1-8, of the above-identified application. The requisite fee for submitting this brief (\$150.00, 37 C.F.R. § 1.17(f)) is attached hereto and this brief is being filed in triplicate. Any deficiency in the fees associated with this brief should be

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charged to deposit account no. 04-1073. The Notice of Appeal was filed on November 22, 1996.

I. REAL PARTY IN INTEREST

The real party in interest is Charles B. Simone, named inventor of the instant application.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant or Appellant's representative which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 1-8 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter, in particular to a method of doing business. Claims 1-8 also stand rejected under 35 U.S.C. § 103 as being unpatentable over DeTore et al. (U.S. Patent No. 4,975,840).

#### IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final rejection issued on August 30, 1996.

#### V. SUMMARY OF INVENTION

The present invention relates to a system and method for evaluating the health insurance liabilities of individuals based on their respective life styles. More specifically, this invention relates to a computer system for evaluating the cost to an employer or an insurance administrator for insurance coverage for individuals, where this cost will be a function of inputs reflecting lifestyle choices of the individual. The claimed computer system performs a detailed analysis of an individual's lifestyle factors by assessing the risks associated with such factors. The computer system then assigns a monetary insurance value to that individual based on a complete assessment of the lifestyle factors.

A valuable result of the above described system, is that the invention provides a completely automated health insurance evaluation system wherein a potential insured can interactively respond to a computer generated query. (Specification, page 8, lines 15-18). The questions cover a wide array of lifestyle choices including: use of various drugs,

geographic information, exercise habits, nutrition patterns, social/sexual behavior, occupational data, exposure to radiation and chemicals, and stress. (Specification, p. 17, lns. 2-9; see also, Fig. 2). To assure the veracity of the answers, a separate set of medical questions is sent to the respondent's doctor or lab technologist. (Specification, p.17, lns. 9-11).

The computer system also attaches a positive or negative value to each response. Depending on the total points assigned a person, he or she would be placed in one of four health insurance plans. (Specification, p. 9, lns. 1-11).

In addition, the computer system correlates past values to present insurance premiums subsequent to the initial survey such as to reward an improvement in an individual's health. (Specification, p. 9, lns. 16-20). Thus, the system provides respondents with an incentive to modify their lifestyles. The system further recommends methods for such modification. (Specification, p. 15, lns. 16-25). For example, messages include information pertaining to correct vitamin doses, intake level of certain foods, suggestions on life style modification, and recommendations for exercise. (Specification, pp. 15-16) .

Thus, the present invention recites a computer system that analyzes and weighs a vast array of information covering an individual's lifestyle, health, and medical records in order to derive an accurate insurance risk evaluation for that individual. (Claim 1, lns. 1-25). Additionally, the invention by way of providing incentives, recommends ways to improve the individual's lifestyle such as to reduce risk factors.

#### VI. ISSUES

A. Whether claims 1 - 8 were properly rejected under 35 U.S.C. § 101 as failing to recite statutory subject matter?

B. Whether claims 1 - 8 were properly rejected under 35 U.S.C. § 103 as being unpatentable over DeTore et al.?

#### VII. GROUPING OF CLAIMS

Claims 1 - 8 stand or fall together.

## VIII. ARGUMENT

A. Claims 1-8 Recite Statutory Subject Matter, And The Rejection Under 35 U.S.C. § 101 Should Be Reversed by this Board.

1. The Claims As Presented Are Statutory Computer Claims.

Claims 1-8 are directed to statutory subject matter.

Title 35 U.S.C. § 101 provides that patents may be granted for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." The broad sweep of section 101, while not encompassing laws of nature or a mathematical expression thereof, might indeed cover "a novel and useful structure created with the aid of knowledge of scientific truth." Mackay Radio & Telegraph Co. v. Radio Corp. of America, 306 U.S. 86, 94 (1939); see also Diamond v. Diehr, 450 U.S. 175, 188 (1981). This distinction may be phrased as "a patentable 'process' and an unpatentable 'principle.'" Parker v. Flook, 437 U.S. 584, 590 (1978). In a recent landmark decision the Court of Appeals for the Federal Circuit stated:

The plain and unambiguous meaning of §101 is that any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may be patented if it meets the requirements for patentability set forth in Title 35, such as those found in §§ 102, 103, and 112. The use of the expansive term "any" in § 101 represents Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in § 101 and the other parts of Title 35

. . . . Thus, it is improper to read into § 101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations.

In Re Alappat, 33 F.3d 1526, 1542 (Fed. Cir. 1994). This decision reiterated the notion that computers operating pursuant to software can be patentable subject matter because "a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software." Id. at 1545.

Claims 1-8 of the present invention all contain a general purpose computer specifically programmed to perform particular functions, as in Alappat. In particular, the general purpose computer becomes a unique insurability evaluation system that not only factors in current medical problems, but also takes into account various lifestyle choices of individuals. (see, claim 1, lns. 1-4, reciting "A computer system for evaluating insurability of at least one individual, comprising: survey means for gathering information pertaining to said individuals' lifestyle, health, and medical tests;"). The system performs a number of particular functions, including surveying individuals to obtain information regarding health, lifestyle and medical tests, assigning weight values to each discrete piece of information, determining level of insurability risk based on

weight values, and providing information for improving health and decreasing insurability risk. (claim 1, lns. 6-14). Pursuant to instructions from software, the general purpose computer becomes a special purpose system that renders a complete analysis of the individuals' health, calculates the amount of insurability risk, and serves as a mechanism for dispensing helpful recommendations for improving an individuals' health status and for decreasing insurability risk.

**2. The Claims Do Not Merely Represent a Method of Doing Business.**

Contrary to the finding of the Examiner, the present invention does not lie in "a method of doing business." Office Action, paper # 20, p. 1 (Aug. 30, 1996). The claimed invention indeed discloses a computer system. It is simply untrue that the claimed system comprises steps which "fall within the penumbra of activities performed by insurance sales personnel." Office Action, paper # 9, p. 5, (Dec. 27, 1994). To state otherwise, is to ignore the essence of the present invention as claimed. The present invention, is not an insurance sales device. Moreover, to the extent insurance salespersons make insurability risk assessments based on red flags such as medical problems and alcohol/tobacco use, they are not able to assess risk based on all of the factors set forth by the present invention. The

claimed system functions as a full-service automated health analysis tool that not only calculates insurability risk, but also makes recommendations for decreasing risk by improving one's health conditions. Insurance sales personnel cannot engage in such activity, partially because of the myriad data that must be gathered and analyzed simultaneously, and partially because the solution presented by the invention (raising or lowering rates/risk) are too complex to possibly calculate on a form.

Instead insurance sales personnel, as well as others, may use the present invention to their advantage in assessing the health insurance liabilities of individuals. Thus, the present invention is not merely a method of doing business; it is an intricate computerized tool for lifestyle risk evaluation and insurability determination, that increases the sophistication of an analysis that a salesperson may employ. Such computerized tools are of widespread use in business. The fact that they are used by businesses, such as insurance companies, would not render these computerized tools non-statutory. Indeed their utility as business tools should also factor into their meeting the § 101 threshold.

Furthermore, the Examination Guidelines for Computer-Related Inventions ("the Guidelines") published on February 28, 1996, specifically state that when it comes to

computer related inventions, "[c]laims should not be categorized as method of doing business." Manual of Patent Examining Procedure, 2106, at 2100-5 (1996). According to the Guidelines, the first step in examination of a patent application should be to identify and understand the practical aspects of the invention. *Id.* In so doing, only inventions "that possess a certain level of 'real world' value" would be granted a patent. *Id.* As noted previously, the present computer invention has tremendous applicability to insurance valuation.

The Guidelines further state that:

The utility of an invention must be within the 'technological' arts. A computer-related invention is within the technological arts. A practical application of a computer-related invention is statutory subject matter. This requirement can be discerned from the variously phrased prohibitions against the patenting of abstract ideas, laws of nature or natural phenomena. An invention that has a practical application in the technological arts satisfies the utility requirement.

*Id.* at 2100-5, 6 (citations omitted). The Office Action fails to consider the mandate of the Guidelines. A methodical and step-by-step application of the Guidelines to the present invention leads to one conclusion only: that the present invention "has a practical application in the technological arts" and as such the invention is well within the boundaries of statutory subject matter. Therefore, the office action's final

rejection of the present invention does not follow the Guidelines and it should be reversed by this Board.

**B. Claims 1-8 Are Non-Obvious Over Detore Et Al., And The Rejection Under 35 U.S.C. § 103 Should Be Reversed By This Board.**

Claims 1-8 are non-obvious over DeTore et al. The present invention discloses a system which provides for a detailed analysis of an individual's lifestyle and accompanying risks in order to make a monetary insurance value assessment. Unlike the claims of the present invention which are described in more detail below, DeTore analyzes only general characteristics of an individual's risk, and therefore renders an evaluation based on an incomplete picture of an individual. Moreover, DeTore fails to provide useful and practical suggestions to improve one's health.

First, DeTore does not make an analysis based on an individual's all-around lifestyle, including both present and future effects, as provided in the claims of the present invention. (For example, claim 1, lns. 3-4, recites "survey means for gathering information pertaining to said individuals' lifestyle, health, and medical tests.;" see also claim 6; and claim 7, lns. 1-4). Rather, DeTore appears to make an assessment on existing dangerous leisure activities and to calculate the

attendant risks. Specifically, the aspects of an individual's lifestyle which are assessed in DeTore are alcohol use, illicit drug use, and relevant driving history. (Specification, column 12, lns. 58-61). When DeTore inquires into these activities, however, it does so solely to determine whether or not coverage should be declined. Id., at lns. 61-62.

By contrast the present invention, as claimed, provides a weight which is assigned to particular activities, whether or not those activities are risky. Thus, the present invention as claimed assesses a wide array of lifestyle choices, and assigns a value to each. In particular, claim 1 discloses the gathering of information "pertaining to [one's] lifestyle, health, and medical tests." (claim 1, lns. 3-4) (emphasis added). In addition the present invention recites "survey means" (claims 1, lns 3-4) and a method of "gathering information" (claim 7, lns. 3-4) for evaluating, among other things:

(1) personal information, (2) geography, (3) occupation, (4) present nutrition, (5) past nutrition, (6) height and weight, (7) tobacco use, (8) alcohol use, (9) hormonal factor, (10) exercise, (11) stress, (12) radiation and chemicals, (13) personal history, (14) drug use, (15) family history, (16) safety, (17) medical information, and (18) pets.

(Specification, p. 17, lns. 3-9). By automatically assessing a variety of health-related categories, the present

invention is able to evaluate all characteristics of an individual, thus providing a full and more precise assessment of risks. By contrast, DeTore only assesses existing medical problems and other red flags such as tobacco or illicit drug use to evaluate risks. The present invention goes farther than that recognizing the fact that one's "lifestyle" rather than merely one's existing medical problems has a significant impact on one's health. As such, the present invention, unlike DeTore, treats such choices as an integral part of the risk analysis. By evaluating the individual as a whole, taking into account present conditions and possible effects in the future, the present invention makes a proper risk assessment. (see, claim 2, lns. 3-4, reciting means for assigning "negative values for actions that increase insurance risks and positive values for actions that decrease insurance risk.").

Armed with a precise assessment of an individual's health, the present invention utilizes messaging means (claim 1, lns. 19-20) and provides the respondent with useful recommendations for treatment of health problems and for altering one's lifestyle to ensure better health in the future. Because these recommendations are discrete pieces of information in response to the wide variety of questions asked, they are specific and closely tailored to the needs of the individual.

In contrast, the DeTore patent merely provides the individual with general literature on a medical problem. For example, as the Examiner noted, DeTore provides suggestions on how to improve one's health in the "TREATMENT" section of the information supplied to an individual suffering from hypertension (DeTore cols. 19-22). This information, however, is merely a string of general statements on the treatment of hypertension. While it describes different methods for combating hypertension, it fails to make specific recommendations in light of the needs of a particular individual. For example, while DeTore broadly recommends "eliminat[ing] if possible" the risk factor of "elevated cholesterol," the present invention provides a guide for accomplishing this by suggesting the reduction of intake of specific foods. (see, claim 1, lns. 19-20, "messaging means for providing messages to at least such individual that contain said pre-defined suggestions."). Such a message may include the following: "CHOLESTEROL is increased by: 1.) Red meat; 2.) Dairy products; 3.) Nuts; 4.) Shellfish." (specification, pp. 15-16).

Additionally, DeTore only provides an individual with recommendations for the treatment of medical problems. It fails to make suggestions regarding other factors that contribute to poor health, such as certain lifestyle choices, as does the

present invention. (see, claim 7, lns. 17-20, "choosing pre-defined suggestions for improving health and decreasing risk based upon said insurance comparison; providing messages to such individual that contain said pre-defined suggestions;"). For example, for individuals who spend a lot of time at the beach, the present system will provide a message that provides cautionary information on radiation exposure (e.g., specification, p. 15, lns. 20-22). By failing to provide useful advice on a great number of day-to-day activities, DeTore neglects to access many other causes of health problems. Hence, it cannot serve as a mechanism to which an individual can turn when seeking out useful information for modifying lifestyle to attain better health.

Contrary to the final office action's contention, a complete survey of an individual's health is not an obvious application of DeTore because it is not in the ordinary practice of risk assessors to inquire into a wide variety of lifestyle choices, let alone to provide recommendations to individuals as to how to reduce insurability risk. As is common in the field of risk assessment, DeTore only focuses on evaluating existing medical problems. It cannot take into consideration lifestyle data as recited in claims 1-8 of the present invention. Likewise, DeTore fails to provide a basis for determining the

effect of lifestyle choices on health insurance coverage as claimed by the present invention. (claim 1). Finally, DeTore fails to analyze and then provide a user with suggestions for improving his or her health condition as in all the claims of the present invention.

In conclusion, the present invention is novel because, in calculating insurance risk, it surveys a wealth of information pertaining to an individual's health. Not only does the present invention evaluate the insurance risk, but it also provides suggestions for improving health and decreasing risk. These functions cannot be accomplished by simple mechanisms which evaluate insurability risk, such as DeTore as well as the other cited prior art references.

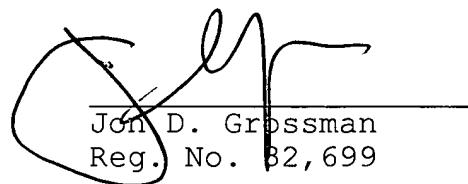
Accordingly, claims 1-8 are non-obvious over DeTore et al. and the rejection under 35 U.S.C. § 103 should be reversed by this Board.

#### IX. CONCLUSION

Therefore, the claims in the present application recite patentable subject matter under 35 U.S.C. § 101, and the claims are non-obvious over DeTore et al. under 35 U.S.C. § 103. The final rejection of claims 1-8 is in error, for at least the

reasons given above, and this rejection should be reversed by this board.

Respectfully submitted,



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## APPENDIX

1. A computer system for evaluating insurability of at least one individual, comprising:

survey means for gathering information pertaining to said individuals' lifestyle, health, and medical tests;

entry means for inputting said gathered information;

a memory for receiving and storing said gathered information;

means for assigning weight values for each of said stored information;

means for assigning risk values to each of said weight values that represent levels of insurance risk;

means for determining a total value based upon said assigned risk values and said assigned weight values for all of said gathered information;

evaluating means for comparing each of said total values for said gathered information with pre-defined accepted values and choosing pre-defined suggestions for improving health and decreasing risk;

messaging means for providing messages to at least such individual that contain said pre-defined suggestions;

analyzing means for determining said level of insurance risk such that both a cost and an insurability profile is determined; and

communicating means for automatically communicating said level of insurance risk.

2. The computer system for evaluating insurability of claim 1, wherein said means for assigning risk values assigns negative values for actions that increase insurance risk and positive values for actions that decrease insurance risk.

3. The computer system for evaluating insurability of claim 1, further comprising a second memory to store underwriter information including said risk values and said weight values.

4. The computer system evaluating insurability of claim 1, further comprising a questionnaire memory means to store a questionnaire said questionnaire being employed by said survey means in order that such individual can select appropriate responses to lifestyle questions.

5. The computer system for evaluating insurability of claim 1, wherein said pre-defined suggestions are automatically differentiated by said computer system for pregnant users.

6. The computer system for evaluating insurability of claim 1, wherein said gathered information about lifestyle includes tobacco use, alcohol use and food intake.

7. A method of evaluating insurability of at least one individual, comprising the steps of:

gathering information pertaining to lifestyle, health, and medical tests;

receiving and storing said gathered information in a memory;

assigning weight values for each of said stored information;

assigning risk values to each of said weight values that represent levels of insurance risk;

determining a total values based upon said assigned risk values and said assigned weight values for all of said gathered information for such individual;

creating an insurance comparison by comparing each of said total values for said gathered information with pre-defined accepted values;

choosing pre-defined suggestions for improving health and decreasing risk based upon said insurance comparison;

providing messages to such individual that contain said pre-defined suggestions;

determining said level of insurance risk such that both a cost and an insurability profile for each of such individuals is determined; and

communicating means for automatically communicating said level of insurance risk.

8. The method of evaluating insurability of at least one individual in claim 7, wherein said step of gathering information comprises the steps of:

providing said individual with a questionnaire; and receiving said individual's answers from said questionnaire.